UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,782	05/25/2006	Ian McDowall	042933/387243	8033

826 7590 09/09/2010

ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER	
HUSSAIN, IMAD	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
09/09/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/559,782	MCDOWALL ET AL.	
	Examiner	Art Unit	
	IMAD HUSSAIN	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06 August 2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's submission dated 12 July 2010 has been received and made of record.

2. Claims 1-23 are currently pending in Application 10/559782.

Response to Arguments

3. Applicant's arguments filed 12 July 20101 have been fully considered but they are not persuasive.

Applicant argues that, in respect to the 35 USC 103(a) rejection of claims 1-23, that the cited references (specifically, *Wydra*) do not teach that the service broker provides a connection point address of the service to the client or that direct communication occurs between the client application and the service.

Examiner respectfully disagrees. The cited reference states "The service broker 30 of the ASF of the present invention resides on the client computer 22, alleviating the client computer 22 of having to be aware of where the requested service is running, interfaces with the application server 24 through the listener 32 of the ASF to get the requested service performed, and provides the handle of the service being performed to the client computer 22. If the application server 24 cannot perform the requested service, and if none of the application servers 24 in the computer system 20 can perform the requested service, the service broker 30 creates the service on the client computer 22 and still provides the handle of the service being executed to the client

computer 22." [Wydra: Column 10 Lines 22-34]. The cited reference also shows direct communication between the client application and the service [Wydra: Figure 6, "2: Execute()"].

Applicant argues that, in respect to the 35 USC 103(a) rejection of claims 1-23, that *Wydra* does not teach that the service broker is located on the second computing device where the service is installed.

Examiner respectfully disagrees with Applicant's interpretation of the prior art. Examiner agrees that Wydra uses the term "service broker" to refer to the client-side component of the ASF. However, the server-side components of Wydra's ASF ("listener" and "client controller") map to the service broker of the Instant Application, as noted in the previous office action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4-7, 10-13, 15-18 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul Wydra et al. (US 6598067 B1, hereinafter *Wydra*) in view of IBM TDB (*Remote propagation of Activity Service customized*

***properties/Customization of Activity Service use of Property Groups*, hereinafter *IBM*).**

Regarding claims 1, 12 and 23, Wydra teaches *a method and apparatus* [Wydra: Abstract and Figure 1]*, comprising:*

registering a published name of a service installed on a second computing device with a service broker ["Application Server Framework (ASF)"] *on the second computing device* [Wydra: Column 5 Lines 22-23, "a list of application servers and the jobs that are executable thereon"]*;*

receiving, by the service broker, a message from a client running on a first computing device, the message specifying the service [Wydra: Column 5 Lines 35-36, "client requests"]*;*

causing a connection point address of the service to be provided to the client by the service broker [Wydra: Column 10 Lines 23-28, "handle"]*;*

wherein the specification of the service does not include *specifying the connection point address of that service, to enable the service broker to start up the service without the risk of a clash* [Wydra: Column 10 Lines 23-28, "alleviating the client computer of having to be aware of where the requested service is running"].

Wydra does not explicitly disclose that the service is specified via a *published name* or that said *published name of the service conforms to a structured naming convention that both uniquely identifies the service itself and uniquely identifies the service as a service from a particular vendor*.

However, IBM teaches that *the published name of the service conforms to a structured naming convention that uniquely identifies the service itself and uniquely identifies the service as a service from a particular vendor* [IBM: Page 2, "The Solution"].

Wydra and IBM are analogous art in the same field of endeavor as both deal with network service registrars. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the naming scheme of IBM for service identification in the system of Wydra. One of ordinary skill in the art would have been motivated to modify the system of Wydra with the naming scheme of IBM because in doing so, the system would allow for identification with greater meaning and uniqueness [IBM: Page 3, "The Solution"].

Examiner's Note: Although Wydra uses the term "service broker" to refer to the client-side component of the ASF, the Instant Application's use of the term corresponds to the *server-side* components of the ASF (notably the "listener" and "connection controller").

Regarding claims 2 and 13, the combination of Wydra and IBM (hereinafter *Wydra-IBM*) *teaches that the structured naming convention uses reversed domain information* [IBM: Page 3, "The Solution"].

Regarding claims 4 and 15, Wydra-IBM teaches *obtaining, by the service a connection point and causing the service broker to be informed of the connection point address and*

causing the client to be informed of the connection point address [Wydra: Column 10 Lines 23-28].

Regarding claim 5 and 16, Wydra-IBM teaches that *the service broker informs the client of the connection point address and the client then uses that address in communicating directly with the server* [Wydra: Column 10 Lines 23-28].

Regarding claim 6 and 17, Wydra-IBM teaches that *the connection point address is a port number* [the network "connection and a handle (pointer to or address of the service)" of Wydra implicitly or inherently contains a port number].

Regarding claim 7 and 18, Wydra-IBM teaches that *in an instance in which service is required more than once, the serivce is not re-started, and the service broker uses cached address information* [Wydra: Column 6 Line 4-6 (the address is implicitly "cached" by the listener)].

Regarding claim 10 and 21, Wydra-IBM teaches *enabling, by the service broker, multiple services installed on a first computing device to serve one or more external clients that are personal computers (PCs) or other computers* [Wydra: Figure 2] *connected by a local link or a remote link, the local link being a cable link, an Infra-Red or short distance radio link, a Bluetooth link, and the remote link being a network data*

connection [it is implicit that the computers are connected via a network data connection].

Regarding claim 11 and 22, Wydra-IBM teaches *causing authentication information to be provided such that only authenticated external clients can access services* [Wydra: Column 4 Lines 28-31].

6. Claims 3, 8, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wydra-IBM as applied to claims 1 and 12 above in further view of Raj Srinivasan (*RFC 1833: Binding Protocols for ONC RPC Version 2*, hereinafter *Srinivasan*).

Regarding claims 3 and 14, Wydra-IBM does not explicitly disclose that *the service broker uses a single well-known port number address so that the client needs only this well known port number to send a message to the service broker*.

However, Srinivasan teaches that *the service broker uses a single well-known port number address so that the client needs only this well known port number to send a message to the service broker* [Srinivasan: "well-known because it uses a fixed transport selector", "port 111 over TCP and UDP", Page 2 Paragraphs 1 and 3]

Wydra-IBM and Srinivasan are analogous art in the same field of endeavor as both deal with service provisioning systems. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the well-

known port number scheme of Srinivasan for communication with a service broker in the system of Wydra-IBM. One of ordinary skill in the art would have been motivated to modify the system of Wydra-IBM with the well-known port number scheme of Srinivasan because in doing so, the system would allow for allowing for standards-compliant communication with service brokers.

Regarding claims 8 and 19, Wydra-IBM does not explicitly disclose that *when services register with the service broker, they register a version number to indicate the version of the service that they are providing*.

However, Srinivasan teaches that *when services register with the service broker, they register a version number to 'indicate the version of the service that they are providing* [Srinivasan: Page 13 Paragraph 4 (PMAPPROC_SET)].

Wydra-IBM and Srinivasan are analogous art in the same field of endeavor as both deal with service provisioning systems. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the versioning scheme of Srinivasan for selecting a particular service version in the system of Wydra-IBM. One of ordinary skill in the art would have been motivated to modify the system of Wydra-IBM with the versioning scheme of Srinivasan because in doing so, the system would allow for clients to request a particular version of a service that best fits the data under consideration or is most compatible with the software architecture being used.

7. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Wydra-IBM and Srinivasan (hereinafter *Wydra-IBM-Srinivasan*) as applied to claims 8 and 19 in further view of Paul Weschler (US 6842903 B1, hereinafter *Weschler*).

Regarding claims 9 and 20, Wydra-IBM-Srinivasan teaches that *the client can request a specific version of a named service* [Srinivasan: Page 13 Paragraph 6 (PMAPPROC_GETPORT)].

Wydra-IBM-Srinivasan does not explicitly disclose that the *highest version available of the named service* is selected *in a case where a version number is omitted by the client.*

However, Weschler teaches that the *highest version available of the named service* is selected *in a case where a version number is omitted by the client* [Weschler: Column 9 Lines 7-12].

Wydra-IBM-Srinivasan and Weschler are analogous art in the same field of endeavor as both deal with service systems. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the default version scheme of Weschler for selecting a version even when one is not explicitly provided in the system of Wydra-IBM-Srinivasan. One of ordinary skill in the art would have been motivated to modify the system of Wydra-IBM-Srinivasan with the default scheme of Weschler because in doing so, the system would allow for the services to function even when a particular version is not explicitly requested.

8. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wydra-IBM-Srinivasan as applied to claims 8 and 19 in further view of Kenneth J. Bugbee (US 6289392 B1, hereinafter *Bugbee*).

Regarding claims 9 and 20, Wydra-IBM-Srinivasan teaches that *the client can request a specific version of a named service* [Srinivasan: Page 13 Paragraph 6 (PMAPPROC_GETPORT)].

Wydra-IBM-Srinivasan does not explicitly disclose that the *highest version available of the named service* is selected *in a case where a version number is omitted by the client.*

However, Bugbee teaches that the *highest version available of the named service* is selected *in a case where a version number is omitted by the client* [Bugbee: Column 5 Lines 4-14].

Wydra-IBM-Srinivasan and Bugbee are analogous art in the same field of endeavor as both deal with service systems. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the default version scheme of Bugbee for selecting a version even when one is not explicitly provided in the system of Wydra-IBM-Srinivasan. One of ordinary skill in the art would have been motivated to modify the system of Wydra-IBM-Srinivasan with the default scheme of Bugbee because in doing so, the system would allow for the services to function even when a particular version is not explicitly requested.

Conclusion

9. **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-3628. The examiner can normally be reached on weekdays from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. H./
Imad Hussain
Examiner, Art Unit 2451

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451